

S/N NEW FILING

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ENGEL ET AL. Examiner: ~~BUSHEY~~ ~~UNKNOWN~~
Serial No.: ~~NEW FILING~~ 9/092580 Group Art Unit: 1724 ~~UNKNOWN~~
Filed: ~~HEREWITH~~ 6-5-98 Docket No.: 758.556USC1
Title: REVERSE FLOW AIR FILTER ARRANGEMENT AND METHOD

jc551 U.S. PRO
09/092580
06/05/98

EXHIBITS FOR INFORMATION DISCLOSURE STATEMENT

AND

DECLARATION OF DONALD F. ENGEL

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Donald F. Engel

Examiner: C. Bushey

Serial No. 08/344,371

Group Art Unit: 1305

Filed: November 23, 1994

Docket: 758.556US01

Title: REVERSE FLOW AIR FILTER ARRANGEMENT AND METHOD

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described hereinabove, are being deposited in the United States Postal Service, as first class mail, in an envelope addressed to: Commissioner of Patents and Trademarks, Box , Washington, D.C. 20231, on this 25th day of June, 1996.

By:

Name: Julie R. Daulton

DECLARATION OF DONALD F. ENGEL

Assistant Commission of Patents
Washington, D.C. 20231

Sir:

I, Donald F. Engel, do hereby declare as follows:

1. I am the person identified as the inventor of the above-referenced patent application, Serial No. 08/344,371, filed on November 23, 1994.

2. In the Information Disclosure Statement being filed with my Declaration, references D1-D8 are in the form of brochures advertising or discussing various air filter arrangements. To the best of my knowledge, each of the air

filters shown in these references was in the public marketplace as products prior to the filing date of my patent application.

3. The air filters shown in references D1-D8 may not show detail which the Examiner may find helpful in order to evaluate these prior art air filter arrangements. I am submitting this Declaration in order to help the Examiner understand the arrangements of the prior art air filters shown in references D1-D8.

4. Reference Nos. D1, D2, and D3 are brochures advertising three different Donaldson air filters. Each of the filters shown in references D1, D2, and D3 used a similar type of drain, which is not shown in the brochures. In the attached Exhibit 1 is an engineering drawing of the type of drain typically used in the air filters shown in references D1, D2, and D3. The engineering drawing of Exhibit 1 has not been published or publicly disclosed in any way, so the drawing itself is not prior art. However, the drain it depicts in the drawing is the drain typically used in the air filters shown in references D1, D2, and D3. That is, the teaching of Exhibit 1 is of the type of drain typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application.

Referring now in more detail to Exhibit 1, reference letter A is pointing to an end cap. As shown in the drawings, end cap A slants downwardly from a central axis of the canister of the filter toward a hole B, which is in end cap A. Reference character C is pointing to the outside surface of end cap A. Reference character G is pointing to a bottom cover which covers end cap A and includes a second drain hole F. Reference character E is a gasket between bottom cover G and end cap A. D is pointing to a gap between bottom cover G and end cap A.

Exhibit 2 is another engineering drawing which has not been published and has not been publicly disclosed. However, it depicts more of the details of the end cap shown in Exhibit 1, and used in the air filter shown in references D1, D2, and D3. The teaching of Exhibit 2 is of the type of end caps typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. Exhibit 2 illustrates specific dimensions of end cap A. The drain hole B is shown in end cap A.

Attached also is Exhibit 3. It is a hand sketch I made which illustrates the end cap and gasket assembly used in the air filter described in references D1, D2, and D3. The sketch of Exhibit 3 was prepared when I recorded my invention for

Donaldson, and is not prior art in that it was not published or publicly disclosed prior to the filing date of my patent application. However, the end cap assembly it illustrates is the end cap assembly used in the air filters shown in the product brochures of D1, D2, and D3. The teaching of Exhibit 3 is of the type of end caps typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. The drain hole B is the same drain hole B of Exhibits 1 and 2.

Exhibit 4 is another engineering drawing of a bottom cover typically used for the air filters shown in references D1 and D2. This engineering drawing has not been published or publicly disclosed prior to the filing date of my application. However, the bottom cover which is illustrated is the style of bottom cover used for the air filters shown in the product brochures D1 and D2. The teaching of Exhibit 4 is of the type of bottom covers typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. Reference character G is pointing to the bottom cover, and reference character F is pointing to the drain hole in the bottom cover.

Exhibit 5 is an engineering drawing of a bottom cover typically used for the air filter shown in reference D3. This engineering drawing has not been published or publicly disclosed prior to the filing date of my application. The bottom cover which is illustrated is the style of bottom cover used for the air filters shown in the product brochure D3. The teaching of Exhibit 5 is of the type of bottom cover typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. The drain hole in the bottom cover is shown as reference character F.

Exhibit 6 is also an engineering drawing, but which is not prior art. However, the drain arrangement which is illustrated in Exhibit 6 is an optional design available in the prior art air filter shown in reference D3. The teaching of Exhibit 6 is of the type of drain arrangement typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. The hole in bottom cover G is covered with a valve H.

5. D4 is a brochure of a Donaldson air filter. This air filter uses a drain arrangement which is not shown in detail in the brochure. The Examiner's attention is directed to the bottom of the first page of the brochure of D4, and to reference

character H, which was drawn in. Reference character H is pointing to a valve.

The drain arrangement used in the air filter of reference D4 is described in Exhibits 1-5, and in my paragraph No. 4 above. One way the air filter in D4 differs from the air filters shown in Exhibits 1-5 is that the hole F in the bottom cover G is covered with a valve H. Exhibit 7 is an engineering drawing of a filter arrangement of the type used in the product shown in D4. The engineering drawing of Exhibit 7 has not been published or publicly disclosed. However, the drain arrangement illustrated in the drawing is embodied in the product shown in reference D4. The teaching of Exhibit 7 is of the type of drain arrangement typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. Reference character H is pointing to a valve.

Exhibit 8 is my hand sketch of an end cap with a valve arrangement, such as that used typically in the product of reference D4. This hand sketch was prepared when I recorded my invention for Donaldson, and has not been published or publicly disclosed prior to the filing date of my application. The teaching of Exhibit 8 is of the type of end cap typically used by air filters which were in the public marketplace as products

prior to the filing date of my patent application. Reference character F is pointing to the central axis of the hole in cover G. H is pointing to the valve covering drain hole F.

6. Reference D5 is a brochure of an air filter sold by Farr Engine Products. This air filter uses a drain arrangement which may not be clearly shown in the brochure.

Exhibit 9 is a hand sketch which I drew in preparation of this Declaration to illustrate the drain arrangement used by the air filter shown in reference D5. My hand sketch has not been published or publicly disclosed prior to the filing date of my patent application. However, the drain it illustrates is embodied in the air filter of reference D5. The teaching of Exhibit 9 is of the type of drain typically used by air filters which were in the public marketplace as products prior to the filing date of my patent application. The hand sketch shows a flat bottom end cap with a drain hole, reference character J, in the center.

7. References D6, D7, and D8 are brochures for air filters produced by Farr Engine Products. Reference character K has been drawn in on in references D6-D8, and is pointing to a valve at the bottom of the air filter.

The drain arrangements in the air filter products shown in references D6-D8 are illustrated in my hand sketch of Exhibit 9. In addition to the sketch shown in Exhibit 9, the hole J has a valve K covering it. K has been drawn in on references D6-D8. This valve is similar to the valve shown as reference character H in Exhibit 8.

8. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 6-18-96


Donald F. Engel